

LISTING OF THE CLAIMS

1. (Previously Presented) A medical valve having an open mode to permit fluid flow and a closed mode to prevent fluid flow, the medical valve comprising:
 - a body forming an interior, a proximal port, and a distal port, the interior having a fluid channel between the proximal port and the distal port; and
 - a valving element within the interior of the body, the valving element controlling fluid flow between the proximal and distal ports,
 - the valving element including a resilient member and a plug, the resilient member forming a fluid chamber within the interior of the body, the fluid chamber being at least a part of the fluid channel,
 - the plug cooperating with the resilient member to provide an internal seal within the interior of the body, the internal seal being spaced from the proximal port,
 - the plug radially expanding the resilient member when the valve transitions from the closed mode to the open mode, the radial expansion causing the fluid chamber to have a larger volume when in the open mode than when in the closed mode, the radial expansion also causing the fluid channel to have a larger volume when in the open mode than when in the closed mode.
2. (Original) The medical valve as defined by claim 1 wherein the resilient member forms a proximal seal at the proximal port.
3. (Original) The medical valve as defined by claim 1 wherein the plug includes a plurality of legs that bow outwardly upon application of a distally directed force.
4. (Original) The medical valve as defined by claim 1 wherein the plug includes a plurality of legs that normally bow outwardly.
5. (Original) The medical valve as defined by claim 1 wherein the plug includes a plurality of legs and a leg separator to prevent contact of the legs.

6. (Previously Presented) The medical valve as defined by claim 1 wherein the interior includes a stop, the plug longitudinally moving distally within the interior to contact the stop, the plug radially expanding the resilient member after the plug contacts the stop.

7. (Original) The medical valve as defined by claim 1 wherein the plug includes a distal end, the resilient member having an open distal end, the plug distal end cooperating with the resilient member open distal end to form the internal seal.

8. (Original) The medical valve as defined by claim 7 wherein the internal seal is closed when the resilient member open distal end is occluded by the plug distal end.

9. (Original) The medical valve as defined by claim 1 wherein the valve element is swabbable.

10. (Previously Presented) A medical valve having an open mode to permit fluid flow and a closed mode to prevent fluid flow, the medical valve comprising:

a body forming an interior, a proximal port, and a distal port, the interior having a fluid channel between the proximal port and the distal port;

a valving element within the interior of the body, the valving element controlling fluid flow through the fluid channel between the proximal and distal ports; and

a variable volume fluid chamber that is located within the interior of the body and is at least a part of the fluid channel, the fluid chamber and fluid channel having a larger volume when in the open mode than when the valve is in the closed mode,

the valving element including an internal seal within the interior of the body, the internal seal being spaced from the proximal port.

11. (Original) The medical valve as defined by claim 10 wherein the valving element includes a proximal seal that is spaced from the internal seal.

12. (Original) The medical valve as defined by claim 11 wherein the proximal seal is swabbable.

13. (Original) The medical valve as defined by claim 10 wherein the valving element includes a plug member at least in part within a resilient member.
14. (Previously Presented) The medical valve as defined by claim 13 wherein the resilient member radially stretches a wall of the resilient member as the valve transitions toward the open mode.
15. (Original) The medical valve as defined by claim 10 wherein the valving element includes a split plug member forming at least two portions with separable opposing faces, the opposing faces being substantially flush against each other when in the closed mode.
16. (Previously Presented) A medical valve having an open mode to permit fluid flow and a closed mode to prevent fluid flow, the medical valve comprising:
 - a body forming an interior, a proximal port, and a distal port, the interior having a fluid channel between the proximal port and the distal port;
 - valving means for controlling fluid flow between the proximal and distal ports; and
 - a variable volume fluid chamber within the interior of the body, the fluid chamber being at least a part of the fluid channel, the fluid chamber and fluid channel having a larger volume when in the open mode than when the valve is in the closed mode,
 - the valving means including internal seal means for sealing the valve within the interior of the body, the internal seal means being spaced from the proximal port.
17. (Original) The medical valve as defined by claim 16 wherein the valving means includes a swabbable seal means.
18. (Original) The medical valve as defined by claim 16 wherein the valving means includes a plug within an resilient member.
19. (Original) The medical valve as defined by claim 18 wherein the plug includes means for radially expanding the resilient member when the valve transitions to the open mode.

20. (Original) The medical valve as defined by claim 18 wherein the plug has a plurality of legs that bow outwardly upon application of a distally directed force.

21. (Previously Presented) The medical valve as defined by claim 10 wherein the resilient member forces fluid distally toward the distal port when the valve transitions toward the closed mode.